AMENDMENT UNDER 37 C.F.R. §1.111

USSN: 10/014,516

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:



1. (Original) A method of winding a web around a core at a high speed, comprising the steps of:

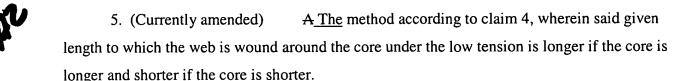
winding the web to a given length around the core under a low tension, then progressively increasing the tension of the web at a predetermined rate until reaching a high tension, and thereafter winding the web under a tension which is being reduced from the high tension.

- 2. (Currently amended) A The method according to claim 1, wherein said given length to which the web is wound around the core under the low tension is longer if the core is longer and shorter if the core is shorter.
- 3. (Currently amended) AThe method according to claim 1, wherein said given length to which the web is wound around the core under the low tension is set to a value up to 15 % of the length to which the web is to be wound.
- 4. (Original) A method of winding a web around a core at a high speed, comprising the steps of:

winding the web to a given length, which corresponds to the length of the core, around the core under a low tension, then increasing the tension of the web to a high tension, and thereafter winding the web under a tension which is being reduced from the high tension.

AMENDMENT UNDER 37 C.F.R. §1.111

USSN: 10/014,516



6. (Currently amended) A The method according to claim 4, wherein said given length to which the web is wound around the core under the low tension is set to a value up to 15 % of the length to which the web is to be wound.

7-8 (Withdrawn)

9. (Original) An apparatus for winding a web around a core at a high speed, comprising:

winding tension storing means for storing a winding tension corresponding to the length to which the web is wound around the core;

torque converting means for reading said winding tension from said winding tension storing means and converting the read winding tension into a winding torque; and

core rotation control means for controlling rotation of the core according to said winding torque;

said winding tension being set so as to wind the web to a given length around the core under a low tension, then progressively increase the tension of the web at a predetermined rate until reaching a high tension, and thereafter wind the web under a tension which is being reduced from the high tension.

10. (Currently amended) An The apparatus according to claim 9, including for simultaneously winding a plurality of webs obtained by cutting a web around respective cores, wherein said winding tension storage means comprises means for storing winding tensions of the respective webs, and said core rotation control means comprises means for independently controlling rotation of the cores respectively according to said winding torques corresponding to said winding tensions.

AMENDMENT UNDER 37 C.F.R. §1.111

USSN: 10/014,516

11. (Original) An apparatus for winding a web around a core at a high speed, comprising:

winding tension storing means for storing a winding tension corresponding to the length to which the web is wound around the core;

torque converting means for reading said winding tension from said winding tension storing means and converting the read winding tension into a winding torque; and

core rotation control means for controlling rotation of the core according to said winding torque;

said winding tension being set so as to wind the web to a given length, which corresponds to the length of the core, around the core under a low tension, then increase the tension of the web to a high tension, and thereafter wind the web under a tension which is being reduced from the high tension.

12. (Currently amended) An The apparatus according to claim 11, including for simultaneously winding a plurality of webs obtained by cutting a web around respective cores, wherein said winding tension storing means comprises means for storing winding tensions of the respective webs, and said core rotation control means comprises means for independently controlling rotation of the cores respectively according to said winding torques corresponding to said winding tensions.

13-17 (Withdrawn)